



Please type a plus sign (+) inside this box TM



Based on PTO/SB/08 a & b (05-03)

Approved for use through 05/31/2003. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Application Number	09/732,181
				Filing Date	12/6/00
				First Named Inventor	Steven Teig
				Group Art Unit	Leigh M. Garbowski
				Examiner Name	2825
Sheet	1	of	4	Attorney Docket Number	SPLX.P0003

RELATED U.S. PATENT DOCUMENTS					
Examiner Initials	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Related Application Data
		Number	Date of filing MM-DD-YYYY		
TP	1.	2002/0133798	12-06-2000	Steven Teig et al.	Application regarding related placement technology.
	2.	2002/0073390 S/N 09/737,210	12-13-2000	Steven Teig et al.	Continuation of 2002/0133798
	3.	Preliminary Amendment S/N 09/737,210	12-13-2000	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2002/0073390 does not accurately reflect the claims of S/N 09/737,210.
	4.	S/N 09/737,220	12-13-2000	Steven Teig et al.	Continuation of 2002/0133798
	5.	S/N 09/737,245	12-13-2000	Steven Teig et al.	Continuation of 2002/0133798
	6.	S/N 09/739,460	12-15-2000	Steven Teig et al.	Continuation of present application
	7.	2002/0124231 S/N 09/739,580	12-15-2000	Steven Teig et al.	Continuation of present application
	8.	Preliminary Amendment S/N 09/739,580	12-15-2000	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2002/0124231 does not accurately reflect the claims of S/N 09/739,580.
	9.	S/N 09/739,589	12-15-2000	Steven Teig et al.	Continuation of present application
	10.	S/N 09/742,171	12-19-2000	Steven Teig et al.	Continuation of present application
	11.	2003/0121015 S/N 09/745,067	12-19-2000	Steven Teig et al.	Continuation of present application
	12.	Preliminary Amendment S/N 09/745,067	12-19-2000	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2003/0121015 does not accurately reflect the claims of S/N 09/745,067.
	13.	2002/0069397	01-13-2002	Steven Teig et al.	CIP of the present application.
	14.	2002/0170027	02-20-2002	Steven Teig et al.	CIP of present application
	15.	2002/0157075	02-20-2002	Steven Teig et al.	CIP of present application

Examiner Signature		Date Considered	2/2007
--------------------	--	-----------------	--------

¹ EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ²Applicant's unique citation designation number(optional). ³See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ⁴Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁵For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁶Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁷Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing the burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Please type a plus sign (+) inside this box TM

Based on PTO/SB/08 a & b (05-03)

Approved for use through 05/31/2003. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of
information unless it contains a valid OMB control number

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Application Number	09/732,181
Sheet	2	of	4	Filing Date	12/6/00
				First Named Inventor	Steven Teig
				Group Art Unit	Leigh M. Garbowski
				Examiner Name	2825
				Attorney Docket Number	SPLX.P0003

RELATED U.S. PATENT DOCUMENTS					
W	16.	2003/0088841 S/N 10/329,241		12-23-2002	Steven Teig et al.
	17.	Preliminary Amendment S/N 10/329,241		12-23-2002	Steven Teig et al.
	18.	2003/0018947		12-07-2001	Steven Teig et al.
	19.	2002/0147958		10-19-2001	Steven Teig et al.
	20.	2003/0079193		12-07-2001	Steven Teig et al.
	21.	2003/0063614		01-04-2002	Steven Teig et al.
	22.	2003/0064559		01-04-2002	Steven Teig et al.
	23.	2003/0063568		01-04-2002	Steven Teig et al.
	24.	2003/0101428 S/N 10/040,915		01-05-2002	Steven Teig et al.
	25.	Preliminary Amendment S/N 10/040,915		01-05-2002	Steven Teig et al.
	26.	2002/0166105 S/N 10/040,948		01-05-2002	Steven Teig et al.
	27.	Preliminary Amendment S/N 10/040,948		01-05-2002	Steven Teig et al.
	28.	2003/0043827 S/N 10/040,953		01-05-2002	Steven Teig et al.
	29.	Preliminary Amendment		01-05-2002	Steven Teig et al.
					This Preliminary Amendment is submitted as the publication 2003/0088841 does not accurately reflect the claims of S/N 10/329,241.
					Application regarding related routing technology
					Application regarding related routing technology
					Application regarding related routing technology
					Application regarding related routing technology
					Application regarding related routing technology
					Application regarding related routing technology
					This Preliminary Amendment is submitted as the publication 2003/0101428 does not accurately reflect the claims of S/N 10/040,915.
					Application regarding related routing technology
					This Preliminary Amendment is submitted as the publication 2002/0166105 does not accurately reflect the claims of S/N 10/040,948.
					Application regarding related routing technology
					This Preliminary Amendment is submitted as the publication 2003/0043827 does not

Examiner Signature		Date Considered	7/20/01
--------------------	--	-----------------	---------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number(optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing the burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



Please type a plus sign (+) inside this box TM



Based on PTO/SB/08 a & b (05-03)

Approved for use through 05/31/2003. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of
information unless it contains a valid OMB control number

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Application Number	09/732,181
Sheet	3	of	4	Filing Date	12/6/00
				First Named Inventor	Steven Teig
				Group Art Unit	Leigh M. Garbowski
				Examiner Name	2825
				Attorney Docket Number	SPLX.P0003

RELATED U.S. PATENT DOCUMENTS					
W		S/N 10/040,953			accurately reflect the claims of S/N 10/040,953.
Y	30.	2003/0023943 S/N 10/040,954	01-05-2002	Steven Teig et al.	Application regarding related routing technology
	31.	Preliminary Amendment S/N 10/040,954	01-05-2002	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2003/0023943 does not accurately reflect the claims of S/N 10/040,954.
	32.	2003/0066042 S/N 10/040,963	01-05-2002	Steven Teig et al.	Application regarding related routing technology
	33.	Preliminary Amendment S/N 10/040,963	01-05-2002	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2003/0066042 does not accurately reflect the claims of S/N 10/040,963.
	34.	2002/0174412 S/N 10/041,942	01-07-2002	Steven Teig et al.	Application regarding related routing technology
	35.	Preliminary Amendment S/N 10/041,942	01-07-2002	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2002/0174412 does not accurately reflect the claims of S/N 10/040,942.
	36.	2003/0088844 S/N 10/041,957	01-07-2002	Steven Teig et al.	Application regarding related routing technology
	37.	Preliminary Amendment S/N 10/041,957	01-07-2002	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2003/0088844 does not accurately reflect the claims of S/N 10/041,957.
	38.	2002/0199165 S/N 10/046,864	01-13-2002	Steven Teig et al.	Application regarding related routing technology
	39.	Preliminary Amendment S/N 10/046,864	01-13-2002	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2002/0199165 does not accurately reflect the claims of S/N 10/046,864.
	40.	2003/0066043	01-13-2002	Steven Teig et al.	Application regarding related routing technology

Examiner Signature		Date Considered	2/2004
--------------------	--	-----------------	--------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number(optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing the burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



Please type a plus sign (+) inside this box TM

+

Based on PTO/SB/08 a & b (05-03)
 Approved for use through 05/31/2003. OMB 0651-0031
 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
 Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of
 information unless it contains a valid OMB control number

<p>Substitute for form 1449A/PTO</p> <p>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</p> <p>(use as many sheets as necessary)</p>				Application Number	09/732,181
				Filing Date	12/6/00
				First Named Inventor	Steven Teig
				Group Art Unit	Leigh M. Garbowski
				Examiner Name	2825
Sheet	4	of	4	Attorney Docket Number	SPLX.P0003

RELATED U.S. PATENT DOCUMENTS					
	41.	2003/0115566	01-13-2002	Steven Teig	Application regarding related routing technology
	42.	2003/0056187 S/N 10/047,982	01-14-2002	Steven Teig et al.	Application regarding related routing technology
	43.	Preliminary Amendment S/N 10/047,982	01-14-2002	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2003/0056187 does not accurately reflect the claims of S/N 10/047,982.
	44.	2003/0066044	01-13-2002	Steven Teig et al.	Application regarding related routing technology
	45.	2003/0066045	01-13-2002	Steven Teig et al.	Application regarding related routing technology
	46.	2003/0088845 S/N 10/047,978	01-13-2002	Steven Teig et al.	Application regarding related routing technology
	47.	Preliminary Amendment S/N 10/047,978	01-13-2002	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2003/0088845 does not accurately reflect the claims of S/N 10/047,978.

RECEIVED
 OCT 10 2003
 TO 2800 MAIL ROOM

Examiner Signature		Date Considered	2/2004
--------------------	--	-----------------	--------

¹ EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ² Applicant's unique citation designation number(optional). ³ See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ⁴ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁵ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁶ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁷ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing the burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Please type a plus sign (+) inside this box TM

PTO/SB/08A (08-00) - MODIFIED
Approved for use through 10/31/2002. OMB 0651-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

<p>Substitute for form 1449A/PTO MAR 17 2003 INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)</p>				Application Number	09/732,181
Sheet	1	of	3	Filing Date	12/6/00
				First Named Inventor	Steven Teig
				Group Art Unit	2161
				Examiner Name	
				Attorney Docket Number	SPLX.P0003

U.S. PATENTS RELATED TO THE PRESENT APPLICATIONS						
Examiner* Initials	Cite No. ¹	U.S. Patent Document Number Kind Code ² (if known)		Name of Patentee or Applicant of Cited Document	Date of Publication MM-DD-YYYY	Relation to Present Application
	1.	6,516,455	B1	Teig, et al.	02-04-03	

U.S. PATENT DOCUMENTS						
Examiner* Initials	Cite No. ¹	U.S. Patent Document Number Kind Code ² (if known)		Name of Patentee or Applicant of Cited Document	Date of Publication MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
✓	2.	2001/ 0003843	A1	Scepanovic et al.	06-14-01	
	3.	4,615,011		Linsker	09-30-86	
	4.	5,097,422		Corbin, II et al.	03-17-92	
	5.	5,532,934		Rostoker	07-12-96	
	6.	5,566,078		Ding et al.	10-15-96	
	7.	5,578,840		Scepanovic et al.	11-26-96	
	8.	5,634,093		Ashida et al.	05-27-97	
	9.	5,636,125		Rostoker et al.	06-03-97	
	10.	5,650,653		Rostoker et al.	07-22-97	
	11.	5,742,086		Rostoker et al.	04-21-98	
	12.	5,757,656		Hershberger et al.	05-26-98	
	13.	5,777,360		Rostoker et al.	07-07-98	RECEIVED MAR 25 2003
	14.	5,811,863		Rostoker et al.	09-22-98	
	15.	5,822,214		Rostoker et al.	10-13-98	
	16.	5,859,449		Kobayashi et al.	01-12-99	
	17.	5,898,597		Scepanovic et al.	04-27-99	
	18.	5,914,887		Scepanovic et al.	06-22-99	
	19.	5,973,376		Rostoker et al.	10-26-99	
	20.	6,035,108		Kikuchi	03-07-00	
	21.	6,058,254		Scepanovic et al.	05-02-00	

Examiner Signature	<i>[Signature]</i>	Date Considered	2/2004
-----------------------	--------------------	--------------------	--------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

MAR 17 2003 ^{Substitute for form 1449A/PTO}				Application Number	09/732,181
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Filing Date	12/6/00
(use as many sheets as necessary)				First Named Inventor	Steven Telg
				Group Art Unit	2161
				Examiner Name	
Sheet	2	of	3	Attorney Docket Number	SPLX.P0003

U.S. PATENT DOCUMENTS					
W	22.	6,068,662		Scepanovic et al.	05-30-00
	23.	6,123,736		Pavsic et al.	09-26-00
	24.	6,134,702		Scepanovic et al.	10-17-00
	25.	6,155,725		Scepanovic et al.	12-05-00
	26.	6,175,950		Scepanovic et al.	01-16-01
	27.	6,216,252	B1	Dangelo et al.	04-10-01
	28.	6,230,306	B1	Raspopovic et al.	05-08-01
	29.	6,247,167	B1	Raspopovic et al.	06-12-01
	30.	6,249,902	B1	Igusa et al.	06-19-01
	31.	6,260,179	B1	Ohsawa et al.	07-10-01
	32.	6,262,487	B1	Igarashi et al.	07-17-01
	33.	6,289,495	B1	Raspopovic et al.	09-11-01
	34.	6,301,686	B1	Kikuchi et al.	10-09-01
	35.	6,385,758	B1	Kikuchi et al.	05-07-02
	36.	6,401,234	B1	Alpert et al.	06-04-02
	37.	6,405,358	B1	Nuber	06-11-02
	38.	6,412,097	B1	Kikuchi et al.	06-25-02
	39.	6,436,804	B2	Igarashi et al.	08-20-02
	40.	6,463,575	B1	Takahashi	10-08-02

RECEIVED
MAR 25 2003
TO 2800 MAIL ROOM

RECEIVED
MAR 19 2003
GROUP 3600

FOREIGN PATENT DOCUMENTS							
Examiner* Initials	Cite No. ¹	Foreign Patent Document Office ² Number ⁴	Kind Code (If known) ⁵	Name of Patentee or Applicant of Cited Document	Date of Publication MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
W	41.	JP	64-15947	Ouchi	01-19-89		

NON PATENT LITERATURE DOCUMENTS					
Examiner Signature				Date Considered	2/20/04

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Please type plus sign (+) inside this box TM

PTO/SB/08A (08-00) - MODIFIED
Approved for use through 10/31/2002. OMB 0851-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

SEARCHED & TRADEMAILED

MAR 17 2003 Substitute for form 1449A/PTO				Application Number	09/732,181
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Filing Date	12/6/00
(use as many sheets as necessary)				First Named Inventor	Steven Teig
Sheet	3	of	3	Group Art Unit	2161
				Examiner Name	
				Attorney Docket Number	SPLX.P0003

NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁴
	42.	A.H. Farrahi et al., Quality of EDA CAD Tools: Definitions, Metrics and Directions, Quality Electronic Design, 2000, Proceedings of the first International Symposium on March 2000, pp 395-405.	
	43.	C. Chiang, et al., Wirability of Knock-Knee Layouts with 45° Wires, IEEE Transactions on Circuits and Systems, Vol. 38, Issue 6, pp 613-624, June 1991.	
	44.	J. Su et al., Post-Route Optimization for Improved Yield Using Rubber-Band Wiring Model, 1997 International Conference on Computer-Aided Design, pp 700-706, November 1997.	
	45.	J. Vicente, RSR: A New Rectilinear Steiner Minimum Tree Approximation for FPGA Placement and Global Routing, Proceedings of the 24 th Euro Micro Conference, pp 192-195, August 1998.	
	46.	K. Powers et al., The 60° Grid: Routing Channels in Width d/square root 3, VLSI, 1991, Proceedings., First Great Lakes Symposium on Kalamazoo, MI, USA, pp 214-291, March 1991.	
	47.	M. Alexander et al., Performance-Oriented Placement and Routing for field-programmable gate arrays, Proceedings of the European Design Automation Conference, pages 80-85, 1995.	
	48.	M. Alexander et al., Placement and Routing for Performance-Oriented FPGA Layout, VLSI Design, Vol. 7, No. 1, 1998.	
	49.	M. Igarashi et al., A Diagonal-Interconnect Architecture and Its Application to RISC Core Design, 2002 IEEE Solid-State Circuits Conference, pp 210-460, February 2002.	
	50.	P. Dood, et al. A Two-Dimensional Topological Compactor with Octagonal Geometry, 28 th ACM/IEEE Design Automation Conference, pp 727-731, July 1991.	
	51.	P. Parikh, et al., Congestion Driven Quadratic Placement, Proceedings of Design Automation Conference, 1998, pp 275-278.	
	52.	R. Putatunda et al., VITAL: Fully Automatic Placement Strategies for Very Large Semicustom Designs, Proceedings of the International Conference on Computer Design: VLSI in Computers and Processors, pp 434-439 October 1988.	
	53.	S. Dutt, et al., Probability-Based Approaches to VLSI Circuit Partitioning, IEEE Trans. on Computer-Aided Design of IC's and Systems, Vol. 19, No. 5, May 2000, pp 534-549.	
	54.	Y. Sekiyama et al., Timing-Oriented Routers for PCB Layout Design of High-Performance Computers, International Conference on Computer Aided Design, pp 332-335, November 1991.	

RECEIVED
MAR 25 2003
TC-2800 MA

RECEIVED

MAR 19 2003

GROUP 3600

Examiner Signature	<i>[Signature]</i>	Date Considered	2/2003
--------------------	--------------------	-----------------	--------

¹ EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

² Unique citation designation number. ³ See attached Kinds of U.S. Patent Documents. ⁴ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁵ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

⁶ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 18 if possible. ⁷ Applicant is to place a check mark here if English language Translation is attached.

Please place a plus sign (+) inside this box TM



Based on PTO/SB/08 a & b (05-03)

Approved for use through 05/31/2003. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number



Substitute for form 1449A/PTO
**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet	1	of	7	Application Number	09/732,181
				Filing Date	12/6/00
				First Named Inventor	Steven Teig
				Group Art Unit	2825
				Examiner Name	Leigh M. Garbowski
				Attorney Docket Number	SPLX.P0003

U.S. PATENT DOCUMENTS					
Examiner* Initials	Cite No. ¹	U.S. Patent Document Number	Kind Code ² (if known)	Date of Publication MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
WT	1.	2001/0009 031	A1	07-19-2001	Nitta et al.
	2.	2002/0182 844	A1	12-05-2002	Igarashi et al.
	3.	2003/0025 205	A1	02-06-2003	Shively
	4.	2003/0005 399	A1	01-02-2003	Igarashi et al.
	5.	4,593,363		06-03-1986	Burstein et al.
	6.	4,855,929		08-08-1989	Nakajima
	7.	5,375,069		12-20-1994	Satoh et al.
	8.	5,587,923		12-24-1996	Wang
	9.	5,618,744		04-08-1997	Suzuki et al.
	10.	5,633,479		05-27-1997	Hirano
	11.	5,637,920		06-10-1997	Loo
	12.	5,640,327		06-17-1997	Ting
	13.	5,663,891		09-02-1997	Bamji et al.
	14.	5,757,089		05-26-1998	Ishizuka
	15.	5,784,289		07-28-1998	Wang
	16.	5,798,936		08-25-1998	Cheng
	17.	5,838,583		11-1998	Varadarajan et al.
	18.	5,889,677		03-30-1999	Yasuda et al.
	19.	5,980,093		11-09-1999	Jones et al.
	20.	6,070,108		05-30-2000	Andreev et al.

Examiner Signature		Date Considered	2/2004
-----------------------	--	--------------------	--------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number(optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing the burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Please type a plus sign (+) inside this box TM



Based on PTO/SB/08 a & b (05-03)

Approved for use through 05/31/2003. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of
information unless it contains a valid OMB control number



Substitute for form 1449A/PTO
**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet	2	of	7	Application Number	09/732,181
				Filing Date	12/6/00
				First Named Inventor	Steven Teig
				Group Art Unit	2825
				Examiner Name	Leigh M. Garbowski
				Attorney Docket Number	SPLX.P0003

U.S. PATENT DOCUMENTS					
1	21.	6,128,767		10-03-200	Chapman
	22.	6,209,123	B1	03-27-2001	Maziasz et al.
	23.	6,253,363	B1	06-26-2001	Gasanov et al.
	24.	6,295,634	B1	09-25-2001	Matsumoto
	25.	6,324,674	B2	11-27-2001	Andreev et al.
	26.	6,324,675	B1	11-27-2001	Dutta et al.
	27.	6,327,693	B1	12-04-2001	Cheng et al.
	28.	6,330,707		12-11-2001	Shinomiya et al.
	29.	6,378,121	B1	04-23-2002	Hiraga
	30.	6,407,434	B1	06-18-2002	Rostoker et al.
	31.	6,412,102	B1	06-25-2002	Andreev et al.
	32.	6,415,422	B1	07-02-2002	Mehrotra et al.
	33.	6,442,743	B1	08-27-2002	Sarrafzadeh et al.
	34.	6,448,591	B1	09-10-2002	Juengling
	35.	6,473,891	B1	10-29-2002	Shively
	36.	6,480,991	B1	11-12-2002	Cho et al.
	37.	6,490,713	B2	12-03-2002	Matsumoto
	38.	6,519,751	B2	02-11-2003	Sriram et al.
	39.	6,543,043	B1	04-01-2003	Wang et al.
	40.	6,546,540	B1	04-08-2003	Igarashi et al.
	41.	6,557,145	B2	04-29-2003	Boyle et al.
	42.	6,567,967	B2	05-20-2003	Greidinger et al.

10-28-00 MAIL ROOM
NON 17 2003
RECEIVED

Examiner Signature		Date Considered	2/2004
--------------------	--	-----------------	--------

¹ EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ² Applicant's unique citation designation number(optional). ³ See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ⁴ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁵ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁶ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁷ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing the burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Please type a plus sign (+) inside this box TM

Based on PTO/SB/08 a & b (05-03)

Approved for use through 05/31/2003. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of
information unless it contains a valid OMB control number

NOV 12 2003

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet

3

of

7

Application Number

09/732,181

Filing Date

12/6/00

First Named Inventor

Steven Teig

Group Art Unit

2825

Examiner Name

Leigh M. Garbowski

RECEIVED
TC 2825 MAIL ROOM
NOV 17 2003

Attorney Docket Number

SPLX.P0003

FOREIGN PATENT DOCUMENTS

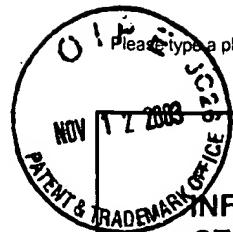
Examiner's Initials	Cite No. ¹	Foreign Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T 6
		Office ³	Number ⁴	Kind Code (if known)			
	43.	JP	411296560	A	Matsumoto et al.	10-29-1999	with English translation of Abstract;
W	44.	JP	2000-82743	A	Igarashi et al.	03-21-2000	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.
	45.	JP	H03-173471	A	Tawada et al.	07-26-1991	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.
	46.	JP	H05-243379	A	Masako Kubota	09-21-1993	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.
	47.	JP	H05-102305	A	Akihiro Sato	04-23-1993	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.
	48.	JP	H07-86407	A	Shinpei Miura	03-31-1995	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.

Examiner Signature		Date Considered	2/2004
--------------------	---	-----------------	--------

¹ EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ² Applicant's unique citation designation number(optional). ³ See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ⁴ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁵ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁶ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁷ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing the burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



Please type a plus sign (+) inside this box TM



Based on PTO/SB/08 a & b (05-03)

Approved for use through 05/31/2003. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of
information unless it contains a valid OMB control number

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Application Number	09/732,181
				Filing Date	12/6/00
				First Named Inventor	Steven Teig
				Group Art Unit	2825
				Examiner Name	Leigh M. Garbowski
Sheet	4	of	7	Attorney Docket Number	SPLX.P0003

FOREIGN PATENT DOCUMENTS							
1	49.	JP	H09-162279	A	Masaaki Yoshida	06-20-1997	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.

RECEIVED
NOV 11 2003
1C 2800 MAIL ROOM

Examiner Signature		Date Considered	2/2004
-----------------------	--	--------------------	--------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number(optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing the burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Please type a plus sign (+) inside this box TM



Based on PTO/SB/08 a & b (05-03)

Approved for use through 05/31/2003. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of
information unless it contains a valid OMB control number



RECEIVED
NOV 17 2003
MAIL ROOM

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Application Number	09/732,181
				Filing Date	12/6/00
				First Named Inventor	Steven Teig
				Group Art Unit	2825
				Examiner Name	Leigh M. Garbowski
Sheet	5	of	7	Attorney Docket Number	SPLX.P0003

FOREIGN PATENT DOCUMENTS

NON PATENT LITERATURE DOCUMENTS

Examiner* Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T 6
50.	Ahuja, R. et al., Faster Algorithms for the Shortest Path Problem, Journal of the Association for Computing Machinery, vol. 37, No. 2, April 1990, pp. 213-223.		
51.	Brady, L. et al., Channel Routing on a 60° Grid, extended abstract, pp. 956-931.		
52.	Brambilla, A. et al., Statistical Method for the Analysis of Interconnects Delay in Submicrometer Layouts, IEEE, 8/2001, pp. 957-966.		
53.	Carothers, K., A Method of Measuring Nets Routability for MCM's General Area Routing Problems, 1999, pp. 186-192.		
54.	Chen, H. et al., Physical Planning of On-Chip Interconnect Architectures, 2002, IEEE, International Conference, pp. 30-35.		
55.	Cheng, K. et al., Manhattan or Non Manhattan? A Study of Alternative VLSI Routing Architectures, pp. 47-52, 2000.		
56.	Cheng, K., Steiner Problem in Octilinear Routing Model, a Thesis Submitted for the Degree of Master of Science, National University Singapore, 1995, pp. 1-122.		
57.	Chip Model with Wiring Cost Map, August 1983, IBM Technical Disclosure Bulletin, vol. 26, iss. 3A, pp. 929-933.		
58.	Cong, J. et al., Efficient Heuristics for the Minimum Shortest Path Steiner Arborescence Problem with Applications to VLSI Physical Design, Cadence Design Systems and UCLA Computer Science Department, pp.88-95.		
59.	Cong, J. et al., Performance-Driven Multi-Layer General Routing for PCB/MCM Designs, UCLA Computer Science Department, 1998, pp. 356-361.		
60.	Enbody, R. et al., Near-Optimal n -Layer Channel Routing, 23 rd Design Automation Conference, 1986, pp. 708-714.		
61.	Fang, S. et al., Constrained Via Minimization with Practical Considerations for Multi-Layer VLSI/PCB Routing Problems, 28 th ACM/IEEE Design Automation Conference, 1991, pp. 60-65.		
62.	Hom, I. et al., Estimation of the Number of Routing Layers and Total Wirelength in a PCB Through Wiring Distribution Analysis, 1996, pp. 1-6.		

Examiner Signature		Date Considered	7/2001
-----------------------	--	--------------------	--------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number(optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing the burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



Please type a plus sign (+) inside this box. TM

Based on PTO/SB/08 a & b (05-03)
 Approved for use through 05/31/2003. OMB 0651-0031
 U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
 Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of
 information unless it contains a valid OMB control number

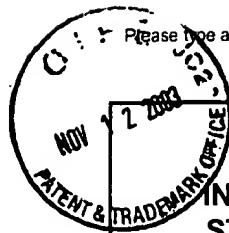
Substitute for form 1449A/PTO				Application Number	09/732,181 <i>ANNU 17 TC 2800 11.9.11 2003 ROOM</i>
				Filing Date	12/6/00
				First Named Inventor	Steven Teig
				Group Art Unit	2825
				Examiner Name	Leigh M. Garbowski
Sheet	6	of	7	Attorney Docket Number	SPLX.P0003

FOREIGN PATENT DOCUMENTS		
✓	63.	Hong, X. et al., Performance-Driven Steiner Tree Algorithms for Global Routing, 30 th ACM/IEEE Design Automation Conference, 1993, pp. 177-181.
	64.	Hu, J et al.: "A Timing-Constrained algorithm for Simultaneous Global Routing of Multiple Nets" IEEE/ACM International Conference on Computer Aided Design, ICCAD - 2000. IEEE/ACM Digest of Technical Papers (CAT. NO.00CH37140), Proceedings of International Conference on Computer Aided Design (ICCAD), San Jose, CA USA, 5-9 Nov. 2000. Pages 99-103.
	65.	Kastner R et al.: "Predictable Routing" IEEE/ACM International Conference on Computer Aided Design, ICCAD - 2000. IEEE/ACM Digest of Technical Papers (CAT. NO.00CH37140), Proceedings of International Conference on Computer Aided Design (ICCAD), San Jose, CA, USA, 5-9 Nov. 2000. Pages 110-113.
	66.	Khoo, K. et al., An Efficient Multilayer MCM Router Based on Four-Via Routing, 30 th ACM/IEEE Design Automation Conference, 1993, pp. 590-595.
	67.	Lillis, J. et al., Table-Lookup Methods for Improved Performance-Driven Routing, 1998, pp. 368-373.
	68.	Lipski, W. et al., A Unified Approach to Layout Wirability, Mathematical Systems Theory, 1987, pp. 189-203.
	69.	Lodi, E. et al., A Preliminary Study of a Diagonal Channel-Routing Model, Algorithmica, 1989, pp.585-597.
	70.	Lodi, E. et al., Lecture Notes in Computer Science, A 4d Channel Router for a Two Layer Diagonal Model, pp. 464-476, July 1988.
	71.	Naclerio, N. et al., Via Minimization for Gridless Layouts, 24 th ACM/IEEE Design Automation Conference, 1987, pp. 159-165.
	72.	Nam, G. et al, Satisfiability-Based Layout Revisited: Detailed Routing of Complex FPGAs Via Search-Based Boolean SAT, 1999, pp. 167-175..
	73.	Oh, J. et al., Constructing Lower and Upper Bounded Delay Routing Trees Using Linear Programming, 33 rd Design Automation Conference, 1996.
	74.	Partitioning Logic on to Graph Structure, IBM Technical Disclosure Bulletin, February 1990, vol. 32, iss. 9A, pp. 469-475.
	75.	Phillips, N., Channel Routing by Constraint Logic, Department of Computer Science Southern Illinois University, ACM, 1992.

Examiner Signature	<i>W.D.</i>	Date Considered	<i>2/20/07</i>
--------------------	-------------	-----------------	----------------

¹ EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ² Applicant's unique citation designation number(optional). ³ See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ⁴ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁵ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁶ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁷ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing the burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



Please type a plus sign (+) inside this box TM

Based on PTO/SB/08 a & b (05-03)
Approved for use through 05/31/2003. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of
information unless it contains a valid OMB control number

RECEIVED

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Application Number	09/732,181
				Filing Date	12/6/00
				First Named Inventor	Steven Teig
				Group Art Unit	2825
				Examiner Name	Leigh M. Garbowski
Sheet	7	of	7	Attorney Docket Number	SPLX.P0003

FOREIGN PATENT DOCUMENTS		
(19)	76.	Takashima, Y. et al, Routability of FPGAs with Extremal Switch-Block Structures, IEICE Trans. Fundamentals, vol. E81-A, No. 5, May 1998, pp. 850-856.
	77.	Thakur, S. et al., Algorithms for a Switch Module Routing Problem, 1994, pp. 265-270.
	78.	Theune, D., et al., HERO: Hierarchical EMC-constrained routing, 11/1992, IEEE pp 468-472
	79.	Tseng, H., Timing and Crosstalk Driven Area Routing, pp. 378-381.
	80.	Wang, D., Novel Routing Schemes for IC Layout, Part I: Two-Layer Channel Routing, 28 th ACM/IEEE Automation Conference, 1991, pp. 49-53.
	81.	Wang, M. et al., Modeling and Minimization of Routing Congestion, Jan. 2000, IEEE proceedings of ASP-DAC, Asia and South Pacific, pp. 185-190.
	82.	Wood, G. et al., FPGA Routing and Routability Estimation Via Boolean Satisfiability, Department of Electrical and Computer Engineering Carnegie Mellon University, Pittsburgh, PA, pp. 119-125.
	83.	Zhang, C.X. et al., Floorplan Design Using a Hierarchical Neural Learning Algorithm, IEEE, 6/1991. pp. 2060-2063.
	84.	Zhou, H. et al., An Optimal Algorithm for River Routing with Crosstalk Constraints, 1996.
	85.	Zhou, H. et al., Global Routing with Crosstalk Constraints, Department of Computer Sciences, University of Texas, 1998, pp. 374-377.
	86.	Zhou, H. et al., Optimal River Routing with Crosstalk Constraints, ACM Transactions on Design Automation of Electronic Systems, vol. 3, No. 3, July 1998, pp. 496-514.

Examiner Signature		Date Considered	2/26/07
--------------------	--	-----------------	---------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number(optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing the burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.